

engineering data service

SYLVANIA
5932
6L6WGA

MECHANICAL DATA

Bulb	T-12
Base[1]	Medium Octal Low Loss Phenolic 7-Pin
Basing	7S
Cathode	Coated Unipotential
Mounting Position	Any

RATINGS

Shock (Intermittent Service-Abs. Max.)	450	g
Vibration (Continuous Service-Design Center)	2.5	g
Mechanical Resonance	None Below 100	cps

ELECTRICAL DATA

HEATER CHARACTERISTICS

Heater Voltage (Avg.)	6.3	Volts
Heater Voltage (Abs. Max.)	7.0	Volts
Heater Voltage (Design Center)	6.3	Volts
Heater Current (Avg.)	900	Ma
Heater Current (Max.)[2]	960	Ma
Heater Current (Min.)[2]	840	Ma

RATINGS

	Absolute Max.	Design Center	
Plate Voltage	400	360	Volts
Screen Voltage	300	270	Volts
Plate Dissipation	21	19.0	Watts
Screen Dissipation	2.75	2.5	Watts
Heater-Cathode Voltage	±200	±180	Volts

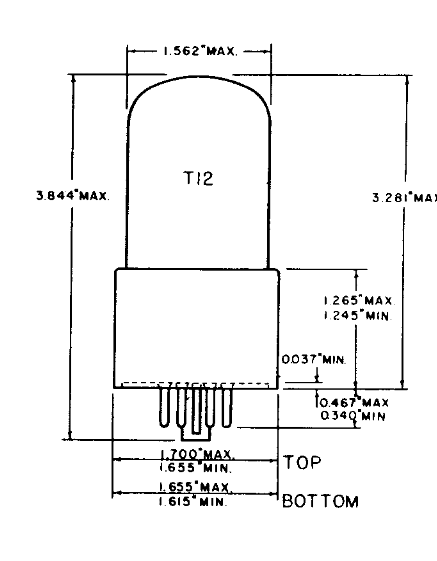
CHARACTERISTICS AND TYPICAL OPERATION

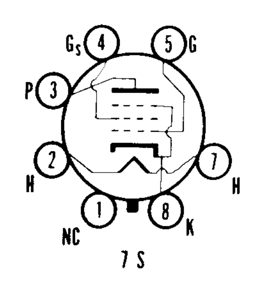
Class A_1 Amplifier (Single Tube)

	Min.[2]	Avg.	Max.[2]	
Plate Voltage		250		Volts
Screen Voltage		250		Volts
Grid Voltage[3]		-14		Volts
Peak A F Signal Voltage		14		Volts
Plate Current (Zero Signal)	58	72	86	Ma
Plate Current (Maximum Signal)		79		Ma
Screen Current (Zero Signal)	0	5	8	Ma
Screen Current (Maximum Signal)		7.3		Ma
Transconductance	5200	6000	6800	µmhos
Plate Resistance		22500		Ohms
Load Resistance		2500		Ohms
Power Output	5.4	6.5		Watts
Total Harmonic Distortion		10		Percent
Grid Current			3.0	µa
Heater-Cathode Leakage at ±200 Volts			75	µa

QUICK REFERENCE DATA

Rugged beam power amplifier designed for use in control or recording devices, or as an amplifier in equipment subjected to mechanical shock or vibration.





SYLVANIA ELECTRIC PRODUCTS INC.

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CHARACTERISTICS AND TYPICAL OPERATION

Class A_1 Amplifier (Single Tube)

Plate Voltage	300	350	Volts
Screen Voltage	200	250	Volts
Grid Voltage[3]	−12.5	−18	Volts
Peak A F Signal Voltage	12.5	18	Volts
Plate Current (Zero Signal)	48	54	Ma
Plate Current (Maximum Signal)	55	66	Ma
Screen Current (Zero Signal)	2.5	2.5	Ma
Screen Current (Maximum Signal)	4.7	7.0	Ma
Transconductance	5300	5200	μmhos
Plate Resistance	35000	33000	Ohms
Load Resistance	4500	4200	Ohms
Power Output	6.5	10.8	Watts
Total Harmonic Distortion	11	15	Percent

Push-Pull Amplifier

	Class A_1		Class AB_1		Class AB_2		
Plate Voltage	250	270	360	360	360	360	Volts
Screen Voltage	250	250	270	270	225	270	Volts
Grid Voltage[3]	−16	−17.5	−22.5	−22.5	−18	−22.5	Volts
Peak A F Grid to Grid Voltage	32	35	45	45	52	72	Volts
Plate Current (Zero Signal)	120	134	88	88	78	88	Ma
Plate Current (Max. Signal)	140	155	132	140	142	205	Ma
Screen Current (Zero Signal)	10	11	5	5	3.5	5	Ma
Screen Current (Max. Signal)	16	17	15	11	11	16	Ma
Transconductance	5500	5700	—	—	—	—	μmhos
Plate Resistance	24500	23500	—	—	—	—	Ohms
Load Resistance	5000	5000	6600	3800	6000	3800	Ohms
Power Output	14.5	17.5	26.5	18	31	47	Watts
Total Harmonic Distortion	2	2	2	2	2	2	Percent

NOTES:

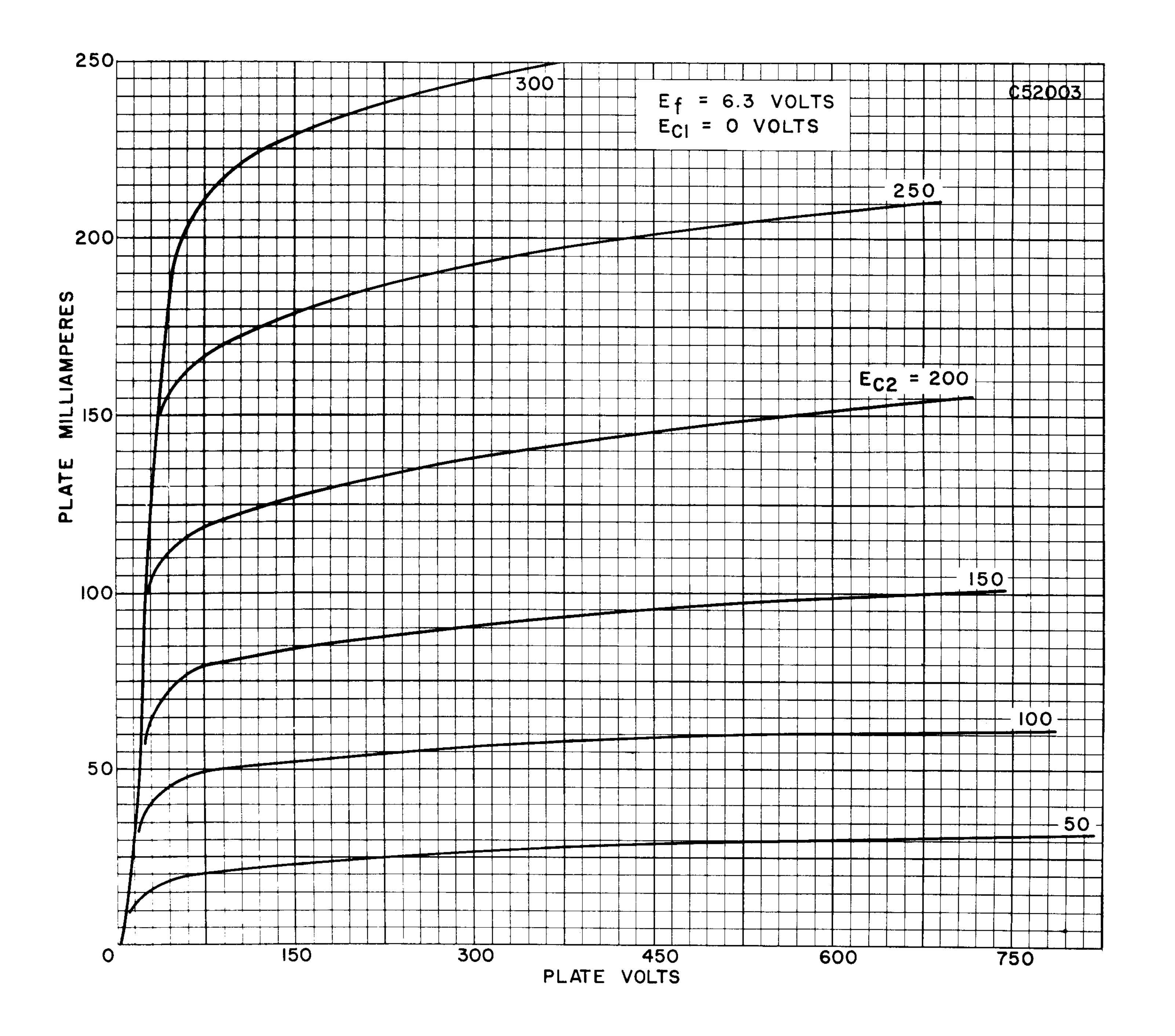
1. *Maximum base dielectric loss factor is 0.1. Reference: ASTM Designation D-150-47T.*
2. *Limits given here are the extremes which may be found in production.*
3. *For fixed bias operation the grid bias resistor should not exceed 0.1 megohm. A grid circuit resistance of .25 megohm may be used for self bias providing the heater voltage will not exceed 7.0 volts under any probable operating condition.*

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AVERAGE PLATE CHARACTERISTICS

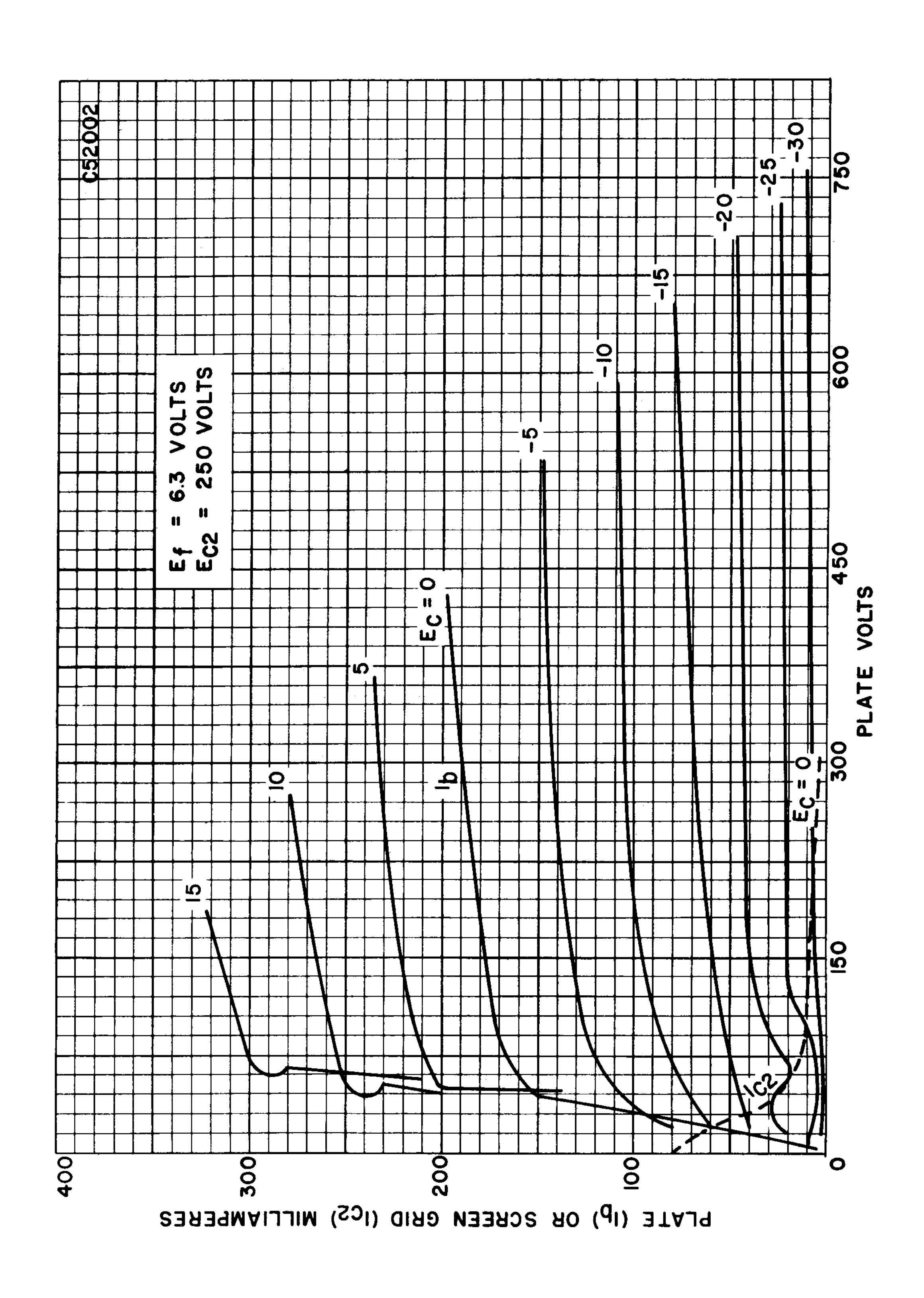


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AVERAGE PLATE CHARACTERISTICS



AVERAGE PLATE CHARACTERISTICS

TRIODE CONNECTED

